2. Phonology

A brief overview of the phonology of the language is given below. A much more detailed treatment is to be found in the second author's dissertation (R. Bugenhagen 1991).

2.1 Word stress

In monomorphemic items and inalienably possessed nouns, stress falls on the initial syllable unless the form contains a long vowel, in which case stress is attracted to the syllable containing the long vowel. In verbs consisting of just a subject prefix plus a monosyllabic verb stem, stress falls on the subject prefix. In verbs containing multisyllabic but monomorphemic verb stems, stress falls on the first syllable of the verb stem, unless it is attracted by a long vowel in the stem. Finally, in multi-morphemic verb stems, stress falls

on the first syllable of the penultimate morpheme in the stem unless it is attracted by a following long vowel.

2.2 Inventory of consonants

Mbula has eighteen consonants:

Table 1. Consonants

		Labial	Dental-Alveolar	Velar
Stops	vl	*p*	*t*	*k*
	vd	*b*	*d*	*g*
Prenasalised		*^{m}b*	*^{n}d*	*^{ŋ}g*
Fricatives	vl		*s*	
	vd		*z*	
Nasals		*m*	*n*	*ŋ*
Laterals			*l*	
Trills			*r*	
Semivowels		*w*	*y*	

2.2.1 Discussion

The only significant allophonic variations are: (1) /b/ → [β] intervocalically, (2) /t/ is palatalised when followed by a vowel cluster beginning with /i/, and (3) the voiceless stops optionally have a voiceless nasal release when they occur pre-pausally.

With regard to distribution, the following observations can be made:

(1) Only the voiceless stops, nasals, /l/, and /r/ occur word finally.

(2) Morpheme medially, there is a neutralisation of contrast between the voiced and voiceless oral obstruents following long vowels. Also, the phonemes /w/ and /y/ do not occur in this environment.

(3) Morpheme initially, there is almost a neutralisation of contrast between voiced oral and voiced prenasalised stops, with the voiced oral stops tending to occur only when followed by oral, non-resonants. A few minimal pairs do, however, occur, cf. /peze/ 'paddle', /beze/ 'garden house', and /^{m}beze/ 'to serve'.

2.3 Inventory of vowels

Table 2. Vowels

	Front	Central	Back
High	*i*		*u*
Mid	*e*		*o*
Low		*a*	

There are five vowels in Mbula: /i, e, a, o, u/. Each of these has the phonetic value normally associated with the given symbol. The two high vowels are slightly lowered when they occur in clusters with non-high vocoids.

There is a contrast in vocoid length, evidenced by pairs like: /-mēte/ 'to die' and /mete/ 'disease'; /-moto/ 'be afraid' and /mōto/ 'snake'.[1] The contrast is very restricted in distribution, however, occurring only in the following environment:

/__ consonant + vocoid of the same quality + morpheme boundary

In the word list, vocoid length is indicated by a macron over the vowel.

2.4 An alternative phonological analysis

The segmented inventories given in sections 2.2 and 2.3 are based upon a relatively concrete analysis. A different analysis is possible if one takes morpheme boundaries into account and permits more abstract phonological representations. Under this second analysis, the length contrast of vocoids is reanalysed as a contrast between vowels which are epenthetically inserted to break up underlying consonant clusters versus vowels which are underlyingly present. A further rule lengthens vowels which are followed by a consonant, an identical vowel, and then a morpheme boundary. Obstruents also receive a different treatment, with both intervocalic voiced and voiceless oral obstruents being underlyingly voiceless. The phonetically voiced oral obstruents are then due to a rule which voices voiceless segments that are

1. Speakers of the Gauru dialect drop the vowel following the lengthened vocoid, if it does not result in a prenasalised stop ending up in morpheme final position. For example, they pronounce /mōto/ 'snake' as /mōt/, but do not drop the final vowel of /lō^{n}do/ 'run'.

underlyingly intervocalic.[1] The differences between the concrete and abstract analyses are perhaps best seen from a comparative listing of some representative forms:

Concrete analysis	**Abstract analysis**	**Meaning**
/bāda/	/-bata/	'to carry''
/pēze/	/pese/	'paddle'
/pesem/	/psem/	'your (sg) navel'
/-moto/	/-mto/	'be afraid'
/mata-/	/mta-/	'eye'
/mōto/	/moto/	'snake'
/kopom/	/kpom/	'your (sg) stomach'
/abe/	/ape/	'ripe'
/ku^{m}bum/	/k^{m}bum/	'your (sg) leg'
/katāma/	/ktama/	'door'
/bībi/	/bipi/	'big'
/bōzo/	/boso/	'many, much'
/paka-/	/pka-/	'half, part'
/-rēge/	/-reke/	'destroy'

In order to insure phonetic transparency, the word list here follows the more concrete analysis. The purpose in outlining the abstract analysis is mainly as a caution to the effect that other analyses of the data are possible, given different methodological assumptions.

Bugenhagen, Salme E. and Robert D. 1995. Mbula. In Tryon, Darrell T. (ed.) Comparative Austronesian Dictionary. Berlin: Mouton de Gruyter.